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Extension Service Review



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THE RURAL COMMUNITY SHARES IN BENEFIT PAYMENTS

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In This Issue

WHAT is the beef cattle situation throughout the country? What is being done to improve this industry? Chester C. Davis, Administrator, Agricultural Adjustment Act, answers these questions for us. He talks of some of the activities of the U. S. Department of Agriculture, the Farm Credit Administration, and the Emergency Relief Administration to meet the emergency that had developed because of the drought. What the Federal and State governments are doing to control diseases of cattle is also discussed.

DIRECTOR W. H. BROKAW, of the Nebraska Extension Service, in discussing "Adjustment Program Influences Extension", says that agricultural adjustment has provided a common field on which men from various farm organizations have worked. It has brought about cooperation of these groups, a lack of which has so often proved to be the stumbling block in the accomplishment of sound extension programs. He believes that the growth that extension has made in its ability to organize information properly, to develop leadership, and to render service indicates a better future in which extension will receive a satisfaction in seeing some of the things which it has worked for enjoyed by farm families.

THREE MILLION farmers in thousands of farm communities are cooperating in adjustment programs. The December 31 figures showed that a total of \$517,953,183.24 has gone in benefit payments to cooperating farmers; that the national farm cash income for 1934 was 20 percent greater than in 1933 and about 41 percent greater than in 1932. We know that this improvement in the financial condition of the farmer has not only benefited him but practically every other group in his community and has been a factor in bettering business conditions generally. These general statements on the beneficial effects of adjust-

ment operations are illustrated clearly by stories of two typical counties—one in Indiana, the other in Illinois—which appear under the title, "Benefits from the Farm Viewpoint."

TWO EXAMPLES of how extension workers and teachers of vocational agriculture worked together in placing vital facts on the cotton situation before farmers in Georgia are given by Hart and Jefferson Counties.

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On The Calendar

Department of Superintendents, National Education Association, Economics Department, Atlantic City, N. J., February 23-28.

Livestock Show and Rodeo, Tucson, Ariz., February 21-23.

Houston Fat Stock Show, Houston, Tex., March 2-14.

Fifty-ninth Annual Convention, Texas and Southwestern Cattle Raisers Association, Houston, Tex., March 12-14.

Southwestern Exposition and Fat Stock Show, Fort Worth, Tex., March 16-24.

National Education Association, Department of Rural Education and Home Economics, Denver, Colo., June.

WHEN the Whitman County (Wash.) Wheat Production Control Association had the task of measuring the wheat and contracted acreage of the largest wheat-producing county in the United States within a period of 6 weeks they saw the difficulty of completing the work in that time by survey crews using the cumbersome chain and wheel methods. They decided to make an aerial survey, and so successful was this method that Walla Walla and Garfield Counties also followed the same plan.

THAT the Federal milk license in the Boston market is proving beneficial to producers is indicated by the fact that during the first 4½ months under the license, as compared with the same period in 1933, there was a total increase in their net income of more than 1½ million dollars. One of the most important undertakings is the so-called "equalization" feature, which makes each distributor bear his share of the class 2, or in the Boston market, so-called "surplus" milk.

READING CLUBS for rural people are meeting with favor in North Dakota where the clothing specialist assisted the director of the State library commission to conduct the project.

THE EXTENSION SERVICE REVIEW is issued monthly by the EXTENSION SERVICE of the United States Department of Agriculture, Washington, D. C. The matter contained in the REVIEW is published by direction of the Secretary of Agriculture as administrative information required for the proper transaction of the public business. The REVIEW seeks to supply to workers and cooperators of the Department of Agriculture engaged in extension activities, information of especial help to them in the performance of their duties, and is issued to them free by law. Others may obtain copies of the REVIEW from the Superintendent of Documents, Government Printing Office, Washington, D. C., 5 cents a copy, or by subscription at the rate of 50 cents a year, domestic, and 75 cents, foreign. Postage stamps will not be accepted in payment.

C. W. WARBURTON, Director

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The Beef Cattle Situation

CHESTER C. DAVIS
Administrator, Agricultural Adjustment Act

TO PRODUCERS of beef cattle, supply, price, and competitive conditions for this class of livestock are definitely encouraging.

Current quotations on fat and feeder cattle indicate a strengthened price structure for the industry. Most sales of cattle in Chicago late in November were at \$6 to \$9 per hundredweight.

Recent auction and private sales of purebred beef and dairy stock have shown substantial increases in average prices compared with those of a year ago.

Marked reductions in the national supplies of hogs and sheep in the last 15 months have improved the competitive position of beef in meat markets.

An increase in rural and urban buying power has been brought about by national recovery measures adopted in 1933.

Since the depression began, owners of cattle have culled their herds on a scale hitherto unknown in the industry.

Supplies of cattle in the United States are now largely adjusted to changed conditions and are tending toward a balance with the consumptive demand.

Beneficial Effects on Dairying

Dairy farmers are sharing in the benefits growing out of adjusted cattle supplies and those resulting from the national recovery efforts begun in 1933. The actual, as well as the potential, na-

tional market for milk and its products is more favorable to producers than it has been for several years.

During the first 9 months of 1933, cattle prices were at the lowest levels in more than 25 years, and a year ago the national surplus of cattle on farms and ranches was one of the chief troublesome facts by which the industry was confronted.

The all-time record number of cattle in the United States was 71,299,000 head in 1918. In 1920 our total cattle population was 70,325,000 head. By 1928 the number had fallen to 56,701,000 head. Cattle classified as "other than milk cows" declined from 48,870,000 head in 1920 to 41,290,000 at the end of 1933.

Dairy cattle increased from 22,129,000 head in 1928 to 26,062,000 head in 1934—the highest number of dairy cattle in our history.

Several million head roughly classified as "beef" or dual-purpose cattle are kept chiefly for milk and butter production. A considerable percentage of this production of milk and butter is marketed in some form.

When cattle kept for milk production are slaughtered for meat, they compete directly or indirectly with beef cattle in the meat markets.

Last year (1933) the Nation's total output of beef from cattle federally inspected was 4,540,956,000 pounds. To

this quantity, steers contributed 52.02 percent, bulls and stags 3.89 percent, and cows and heifers 44.09 percent. Last year's veal production from calves federally inspected was 504,957,711 pounds.

The "Cattle Cycle"

The Nation's cattle population has swung up and down in fairly regular waves or cycles. Each upswing has continued for about 7 years; then the downward swing begins and lasts about 8 years. This is the 15-year "cattle cycle."

While cattle production has exhibited fairly regular periodic increases and declines, it has generally and steadily expanded. Consequently, almost every cycle has been higher than the one just before it.

If there had not been a widespread drought of great severity this year in the United States, our total cattle population would have increased for another year at least before it began to decline, in accordance with the behavior of the cattle cycle.

Cattle Purchases in Drought Areas

In May it became apparent that drought was developing over a wide territory. Personally and through their organizations, owners of cattle in areas where animals had begun to die for want of feed and water appealed to the Agricultural Adjustment Administration for

help. As the drought increased in destructiveness and extent, it threatened the existence of millions of cattle. Both cattle and sheep were perishing.

An unprecedented emergency had developed and was spreading. It was imperatively necessary to meet it. Humane and economic considerations required that it should be met (1) by acting immediately to prevent further losses of cattle by starvation, (2) by killing and burying on ranch or farm cattle unfit for human food or too near death from want of feed to be removed to pastures in distant States, (3) by conserving scant feed supplies in those parts of drought areas where cattle could be maintained without threatened starvation, (4) by protecting owners from the complete loss of their cattle and their homes, (5) by greatly decreasing the forced flow of emaciated cattle from drought areas into already congested trade channels and thereby obviating a disastrous recession of market prices for all cattle, as well as other meat-making livestock, (6) by assisting as many owners as possible to reduce their cattle holdings to a point at which their herds could be maintained with the better animals as a nucleus and their business as cattle producers continued, improved, and developed, (7) by salvaging a vast food supply for distribution among

of Agriculture, the Farm Credit Administration, and the Emergency Relief Administration. Following the creation of the Drought Relief Service, cattle buying was begun where the drought was most acute. By July 2 more than half a million head had been bought on parched western ranges and turned over to the Federal Surplus Relief Corporation, which had them processed for distribution among needy families.

Through to November 24, 1934, the Government had purchased 7,213,818 cattle on about 600,000 farms in drought areas in 24 States, as well as about 3,500,000 ewes. The cattle population of these 24 States includes a high percentage of dual-purpose and dairy cattle.

Texas, Nebraska, North Dakota, South Dakota, Kansas, Missouri, Oklahoma, New Mexico, Montana, Wyoming, Colorado, Minnesota, Utah, Arkansas, Arizona, and Nevada supplied the bulk of the Government's purchases of cattle in drought areas. The other States contributing to the total purchased in drought areas are Idaho, Wisconsin, Louisiana, California, Florida, Iowa, Oregon, and Illinois. About 75 percent of the total purchases consisted of old cows and inferior young she-stock.

Drought relief purchases have reduced the cattle population of these 24 States from nearly 50,000,000 head to 42,229,734

Owners of cattle purchased by the Government in drought areas had received, up to November 25, 1934, the sum of \$97,883,870, or \$13.57 a head.

Cattle Removals by Disease Controls

Dr. John R. Mohler, Chief of the Bureau of Animal Industry of the United States Department of Agriculture, states that of the 15,000,000 cattle tuberculin-tested in the fiscal year ended June 30, 1934, the number reacting and slaughtered was 232,000. Seventy percent of all the cattle tested were dairy cattle. Later figures indicate a higher percentage of reactors because much of the testing has been and is going on in States in which increased funds have been provided for this work.

Present appraisals of cattle reacting to tests for tuberculosis are higher than those of the past year. At the end of the last fiscal year, the appraisals of reactors, including grades and purebreds, averaged \$54.80 a head, while the average salvage value was \$11.45. Usually combined Federal and State indemnities, plus salvage value, are somewhat less than the appraised value.

Under Federal testing for bovine tuberculosis, the State in which reactors are found and slaughtered pays an indemnity which usually exceeds the Federal indemnity. In the last fiscal year the average State indemnity was \$21.41 and the Federal, \$13.80. On this basis, owners of reactors slaughtered have received more than \$46 a head.

In their efforts to control bovine tuberculosis, the Federal and all the State governments and several Territories are cooperating. When this work (begun in 1917) got well under way in 1918, almost 5 percent of tested cattle reacted; the most recent percentage of reactors is 1.5. More than 1,860 counties are on the accredited-area basis, which means that they are practically free from this disease.

It is estimated that, in the country as a whole, about 15 percent of the cattle is infected with Bang's disease or infectious abortion.

Under the LaFollette amendment to the Jones-Connally Act, funds were made available to the Agricultural Adjustment Administration for instituting a plan to control this disease and for dealing with mastitis in cow herds. Up to November 1, 1934, a total of 232,185 cattle had been tested for Bang's disease and 33,363 reacted. Approximately 14 percent of the cattle tested reacted. More than 20,000 head have been tested in each of the States of Virginia, Ohio, Minnesota,

(Continued on page 183)



A Kansas farmer facing a drought feed shortage sells some cattle to the Government.

needy people unable to buy food of any kind, and (8) by taking steps, indicated if not forced by a calamitous drought, toward adjusting the Nation's excessive cattle supplies to the consumptive demand and thus improving cattle prices to producers.

Early in May, plans had been made to meet the situation, in cooperation with long-established units of the Department

head. It is possible that more than 1,000,000 head additional will have been purchased in some of these States by the end of the year. In the event of a hard winter in the leading beef cattle States where the drought was severe, it is probable that the death rate in herds before grass comes will be above normal, and that the 1935 calf crop will be below normal.

Adjustment Program Influences Extension

W. H. BROKAW

Director, Nebraska Extension Service

FOR the past 18 months it has been the privilege of extension workers to take part in the most far-reaching and intensive educational activity our country has ever known. That impression was gained in the early days of the corn-hog program and has been renewed almost daily from watching the activities, reading a constant flow of letters and telegrams, and listening to phone messages without end. The improvement in letters, phone messages, and presentation of material by committeemen and others could be due only to careful study and preparation.

Committeemen and Farmers

Today even in the most remote sections you find committeemen and farmers as equally able to cope with problems arising in the program as those administratively responsible in State or Nation. The more than 3 million signers, together with office and field employees, constitute a great group who have taken part in this unprecedented educational movement.

Extension has been developing for years the leadership that is proving its worth in this program. Men who have carried a project or demonstration, assisted in carrying out programs, conducted community meetings, and led a boys' and girls' 4-H club were preparing themselves unknowingly for this period of service. After a period of war-time activity came years of study and trial of methods of production and marketing which may now prove their fruitfulness. It seems that the world moves forward in succeeding waves each preceded by a period of preparation and trial.

Thus in a study of the influences that the national agricultural recovery program is having on extension we find that it has brought about what we have been striving to do in extension for years—a systematic, careful, and thoughtful study by practically all farmers of their problems. Not alone the immediate production or marketing problem but the basic and underlying facts of world conditions and demands are essential for a complete understanding.

The farmer is willing to do things for himself; in fact, he prefers to do so. In these programs that we are carrying out we must keep this in mind and allow him to do so. The satisfaction and growth he will make in this program will come from his own thoughts and efforts, and

the best thing we can do for him is to guide, but allow him the opportunity to make this growth.

Probably the most lasting influence that the national agricultural recovery program will have upon the Nebraska Extension Service and its cooperating farmers came from the corn-hog referendum.

When previously trained in extension projects or demonstration work most committeemen were able to state the situation clearly and answer questions satisfactorily, but a majority of the new leadership were unable to retain the whole presentation or to handle the questions that arose. The results of the referendum and subsequent surveys, letters and mail votes taken, inspired by an interest to learn why the large negative vote, have renewed our convictions, that we must take nothing for granted. We have long known that new facts and demonstrations need repeating again and again before they are fully understood and applied. Why should we have felt that this hasty training of community leaders would be ample preparation to meet the desire for information that has given trained and prepared leadership a crucial test? The contract signers came with their problems and misinformation, and an interest in the future program and needed definite knowledge in order to cast an intelligent vote. The negative vote was large, not so much from desire to abandon the program, but a protest against little misunderstandings unexplained and incomplete information and unanswered questions on the new program. Extension workers and experienced leaders will not soon forget the lesson relearned.

Educational Program

While the present program has much that is new and demands action on the part of the cooperator, it is primarily educational. It has stimulated rather than changed the extension program. The influence has probably been greatest in the field of the county agent, since his work is so closely linked with the county and community committeemen in direct contact with the contract signer. The number of county agents has been increased greatly during this period; in many counties the cooperative relationship is the same as in old organized ones. The permanency of these new

and emergency agents is largely dependent upon the character of the service rendered. This is also true of the regular county agent. At no time since the inception of the work has he been on trial as at the present. Formerly his job was rendering information and service; while we talked in terms of organization it was but simple in comparison with present needs. His program of work must be carefully planned so that his office organization may function perfectly to render service and information to the larger group of county and community allotment committees, and contract signers. Not only must the personnel and field force be properly organized, but the county agent's office files and daily work must be carefully planned and he must have learned the value of time rightly used. The present county agent must be a general. The man who could manage a one- or two-man organization no longer fills the need. He must be able to care for much of the new work and nearly all of the old through trained leadership. The man who failed to see the value of leadership or failed to train leaders has passed out of the picture or soon will do so.

Field of Agent Enlarged

Through it all the county agent has enlarged his field of service, made vital contacts, found new leaders, and has worked long and hard days, but through it all has worked happily, for others have worked with him eagerly and intelligently to accomplish a definite task. County agents who have worked through the years have found this a most satisfying period.

The work of the past few months has renewed the enthusiasm of old supporters, for it has made possible some of the things the need of which they realized, and which they sought, but for which they had only hoped. It has provided a common field on which men from various farm organizations have worked. It has brought about cooperation of these groups, a lack of which has so often proved to be the stumbling block in the accomplishment of sound extension programs.

If the program brings about this one thing—cooperation of farm groups—it will be worth all the time and labor spent upon it. Here, at least, is a definite influence for common good.

The dropping of much regular work, such as dairy herd improvement, poultry record flocks, and other projects requiring some cash outlay or additional labor on the part of the cooperator, while charged to busy specialists or county agents at work on the emergency program, can be traced to dues, fees, or labor requirements which the farmer was unable to meet. With the return of fair crops and fair prices renewed interest will be found in these projects.

Better Future

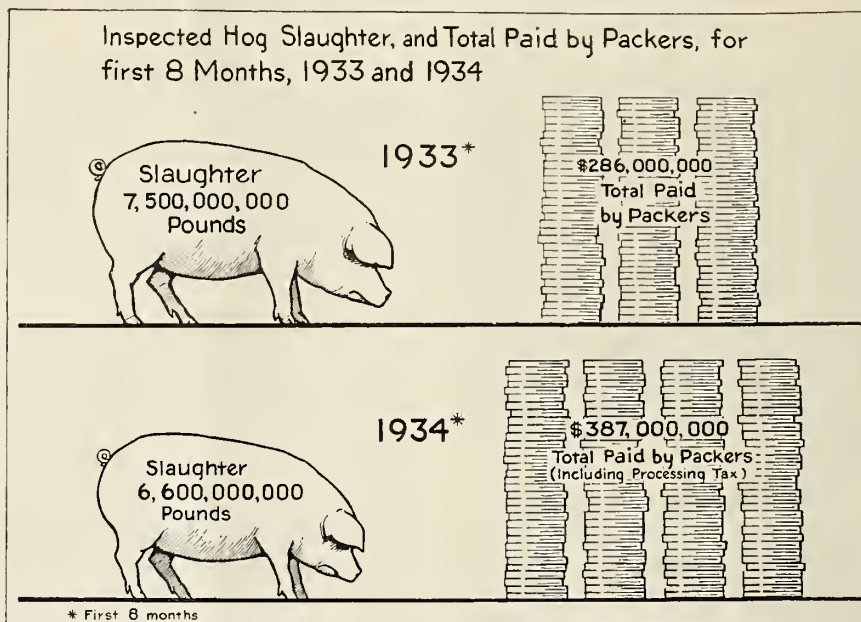
The growth that has come to extension not so much in numbers as in the ability to organize information properly, to develop leadership, and to render service, indicates a better future—a future in which extension will receive a satisfaction in seeing some of the things it has worked for enjoyed by farm families. The growth of the individual, the development of men and women leaders, the value of cooperation of farmers through this great educational movement are certainly paving the way to future betterment.

The part of extension in this program is one of education. We must remember that the welfare of our Nation is wholly dependent upon the training of its people. While the Nation makes its growth in the sciences fundamental to our advancement through highly trained leaders, these leaders must be backed by a people whose masses are informed, intelligent, raised above the fallacies prevalent in ignorance and superstition, believing in their Government and its activities. They must be able to understand fully their own business, its relation to government, and have a general knowledge of world conditions, if they are to succeed in their vocation and maintain happy and satisfying home life.

They may receive their fundamental training in common schools and colleges, but to meet their rapidly changing conditions and problems they must not stop there but be fully and accurately informed through life. This means a continuing education and with the agricultural population, agricultural extension must fill this need, remembering the way is never backward but onward.

A ROADSIDE market contributed 50 percent of the farm income when Mrs. Gideon Vernon, of Washington County, Ark., sold nearly \$1,000 worth of farm products. The market is located near the farm home and Mrs. Vernon does this work in addition to her other home-making activities. The market is open from February to December.

Adjustment Raises Hog Income



Preliminary studies indicate that a substantial increase in hog income is resulting from the adjustment in hog marketings effectuated by the 1933-34 emergency hog-buying programs and the 1934 corn-hog production adjustment program of the Agricultural Adjustment Administration. The graph shows that the total estimated cost to packers for hogs slaughtered under Federal inspection during the first 8 months of 1934, including the processing taxes due, was approximately \$100,000,000 larger than for the corresponding period in 1933.

This represents an increase of about one-third in total cost and of more than one-half in the hundredweight cost of live animals. At the same time, the total

inspected slaughter of hogs for the first 8 months of 1934 was about 12 percent under the total for the corresponding period for 1933.

A part of this gain has been due to an increase in consumer's income and to some adjustment in tonnage effectuated by the shortage of feed supplies resulting from drought, but production control under the Agricultural Adjustment Act has been a large factor. Hog prices throughout the current marketing year are expected to average higher than for several seasons.

Corn-hog farmers in the United States will have an opportunity to hold gains made this past year by cooperating in the 1935 corn-hog program offered by the Agricultural Adjustment Administration.

WILD GAME and wild fruits have been canned for wintertime use by thrifty Routt County, Colo., farm women.

Mountain trout lured from the sparkling streams of the Colorado Rockies and sage chickens have been canned to add the flavor of fish and game to winter meals.

Wild thimbleberries, gooseberries, chokeberries, and service berries are among the native fruits which have been preserved.

At the achievement day more than 500 jars of canned meats, fruits, and vegetables were exhibited by women belonging to home demonstration clubs.

ANDREW SUNDSTRUM, formerly a 4-H club member of Beresford, S. Dak., and now a freshman at State College, is the new president of the Future Farmers of America, an organization composed of 82,000 vocational agriculture students in 47 States and territories. He was elected recently at the annual convention held in Kansas City.

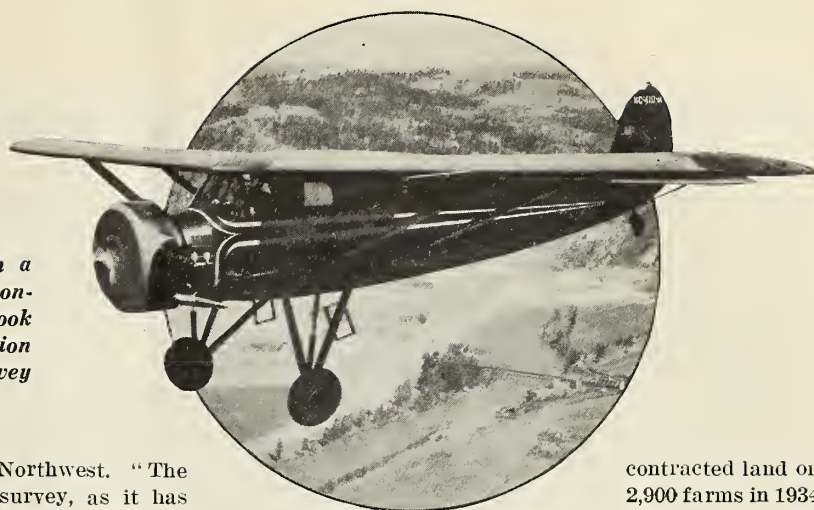
He was also awarded the American Farmer degree at the convention. Only 58 such awards were made. He had to submit evidence that he had \$500 invested in farming and that he had accomplished the 6 objectives of the organization.

Aerial Survey of Wheat Acres

Faced with the problem of completing within a short space of time measurement of wheat and contracted acreage, several counties in Washington took to the air. This account, prepared by Extension Editor W. D. Staats, explains how the aerial survey was conducted.

WHITMAN, Walla Walla, and Garfield Counties in the State of Washington are thoroughly aerial-survey minded. The wheat production control association in each county has in its office an aerial picture of every farm in the county, showing each field, road, building, stream, hill, gully, and the flora. Although on a scale of 1,000 feet to the inch, each feature can easily be distinguished with the naked eye. Weed patches, wheat, oats, summer fallow, pasture, waste land, and hay fields can be identified with a little practice. Accurate measurements have been made of all wheat and contracted acreage, and measurements are ultimately to be made of all classifications of land. The survey not only provided the basis for compliance measurement at less cost

to the Northwest. "The aerial survey, as it has been handled in the State of Washington, offers unlimited possibilities not only in connection with the wheat adjustment program but with innumerable agricultural projects and studies now being conducted by the Agricultural Adjustment Administration", says Mr. Farrell. "I am not only amazed by the accuracy of the measurements obtained by the survey but by the other detail revealed in the pictures. There is very little doubt that the aerial survey will be adopted by other parts of the country where conditions justify it, not only for the value in compliance measurements but for the valuable permanent record of agriculture it provides."



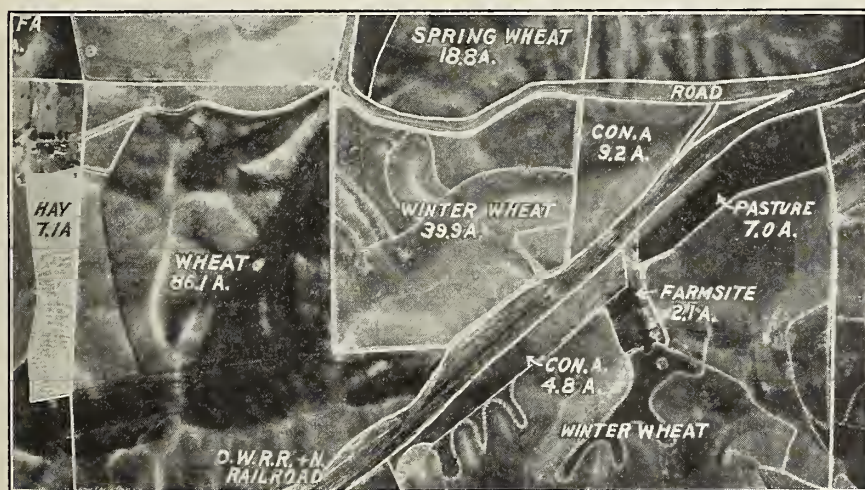
contracted land on 2,900 farms in 1934 and again in 1935.

Adding to the difficulty was the rolling topography of the Palouse country, with hardly a rectangular field in the county.

The association immediately saw that to measure the acreage in 6 weeks with survey crews using wheels and plane tables would require over 100 crews and might cost more than \$50,000. They found that it would take at least a month to obtain enough wheels and plane tables. Enough qualified men could not be obtained for the survey crews and farmers were too busy to assist in the survey. The further the association went into the problem, the clearer they saw the impossibility of completing the survey within the limited time.

The only answer to the problem was an aerial survey. County Agent C. G. Izett and some of the directors were familiar with aerial surveys made in connection with the Pacific Northwest soil erosion project. An immediate conference with several aerial survey companies revealed that this form of land measurement was a perfected science and had been used for some years by the Army Air Corps and by the United States Forest Service. The percentage of error in measurement was shown to be less than 1 percent.

The association found that the items of expense in connection with the survey would be approximately as follows: For office equipment and clerical aid in computing the acreage and checking compliance, \$10,000 for each year; for field work and supervisors for each year, \$6,000; and for the aerial survey pictures which can be used for both years, \$13,300; this amount to be prorated over the 2-year period. The first two items of this expense would be incurred regardless of the method used to make the survey. It is necessary to consider that the aerial survey was the only method that could be used to complete the survey within the limited time, due to the lack of trained men and available equip-



Aerial photograph of a section of typical Pacific Northwest wheat land near Colfax, Wash. Farm sites, hay rows on the winter wheat, and windrows on the hay fields are easily distinguished.

than a ground survey, but gives each county an unexcelled basis for complete land classification, valuation, utilization, taxation, settlement, road building, erosion, weed control, and other agricultural projects and studies.

George E. Farrell, chief of the wheat section, was tremendously impressed with the aerial survey on his recent trip

Seven months ago, the Whitman County Wheat Production Control Association was confronted with the task of measuring the wheat and contracted acreage of the largest wheat-producing county in the United States, before harvest, then only about 6 weeks off. The association was faced with the problem of measuring 510,000 acres of wheat and

ment to make the wheel and plane table survey. As a result of the aerial survey, accurate maps have been assembled of every township in the county, covering not only the 510,000 wheat and contracted acres, but a complete picture of 1,300,000 acres of farm land within the county.

Negotiations were immediately begun with the wheat section of the Agricultural Adjustment Administration for the aerial survey. Although at first reluctant to grant the unusual request, the wheat section did so after being convinced that it was imperative if the job was to be finished in a reasonable length of time. As soon as permission was granted, bids were immediately asked from aerial survey companies in the region. Two other counties, Garfield and Walla Walla, confronted with similar problems in terrain and extent of farms, likewise adopted the aerial survey. Umatilla County, Oreg., adopted the aerial survey method a little later.

The actual survey was begun about the middle of June. Using airplanes especially fitted for altitude work and equipped with sensitive altimeters, electrically operated mapping cameras, directional gyros, drift indicators and oxygen equipment, the actual survey was begun about the middle of June and completed about a month later. The planes flew at an altitude of 14,000 feet above sea level, giving the pictures a ground scale of approximately 1,000 feet to the inch. Each picture covered a ground area approximately 7,000 by 9,000 feet and each overlapped 60 percent to compensate for distortion around the edge of the picture caused by the increased angle in relation to the camera lens.

Maps Marked

As soon as the developed pictures for a township were received in the county agent's office, they were assembled by half townships on ply-board, overlapped and fastened with transparent tape and thumb tacks. A field crew took a half township map showing a continuous picture of the region to each farm in the half township, and, with the assistance of the farmer, marked each individual field with the contract number and symbols indicating spring or winter wheat, contracted acres, summer fallow, oats, barley, pasture, or utilization of each field, at the same time having the farmer fill out and sign the necessary forms.

Each set of contract papers was face-sheeted, maps originally submitted by the farmer attached and the assembled contracts and half township map given to the instrument man in the office. A

planimeter, a special instrument used to measure plane areas, was used to measure each field. The arms of this instrument are set so that when the point of the arm is moved around the edge of the outlined area for three complete circuits, acreage may be read directly from its measuring wheel, provided each linear inch on the picture represents 1,000 feet on the ground.

The measurement was recorded and the papers passed on to the computer whose task was an easy one if the airplane maintained the scale of 1,000 feet to the inch. As the elevation of the Palouse country varies from 500 to 2,800 feet above sea level, variations in scale were present due to the rolling topography and air currents preventing the plane from flying at a constant height. Control lines to determine the true scale were made by using a ground crew with a transit and tape to make enough scale tests for a close check. The scale tests supplied data for plotting a chart, enabling the true scale of any picture to be determined immediately. This provided essentially correct measurement. Repeated checks of the aerial survey with ground surveys revealed less than 1 percent error in each instance.

Acres Measured

Only the wheat and contracted acres were measured in this process in order to expedite allotment payments. All the information obtained, together with the contract number, operator's name and address, and reduction basis for 1934 and 1935 were placed on 5- by 8-inch cards for permanent records. Cards were sent to all contracting farmers giving them the measurements of their wheat and contracted acres and advising them to call at the office where violations were indicated. Compliance papers were completed as soon as possible and sent in to the wheat section.

The office crew consisted of 6 planimeter men who could turn out about 100 contracts a day. Five assistants and supervisors assembled and mounted the photographs, prepared the field papers for the instrument men, recorded results, and checked the work. This crew worked under the supervision of a chief engineer in charge of the office. Two men were in the field making scale tests. Twenty field crews of two men each, working under a general supervisor, secured the desired field information previously mentioned. After the survey was completed one field crew was retained for the purpose of measuring the summer fallow being seeded for next year's crop. The office force was reduced accordingly.

Total administrative costs for the county total less than 8 mills per allotted bushel, the cost of the aerial survey making up 4 of the 8 mills. The average production for the county is placed at 10,461,715 bushels and the allotted bushels amount to 5,649,324.

Since making the survey, the county agent's office has had innumerable requests for measurements from farmers in regard to land sales, plowing and harvesting charges, grain fires and litigations. The county commissioners have appropriated \$6,000 for a mosaic map of the county for the use of the county engineer and county assessor. Many farmers found out for the first time just how many acres they had in their farm, due to the inaccuracy of the old surveys. Although at first skeptical of the aerial survey, the farmers themselves are now the most enthusiastic boosters. It has proved accurate beyond a doubt, has saved the county thousands of dollars in expense, and enabled the compliance program to be carried out swiftly and efficiently.

Butter Quality Improved

Last year 61 farm men and women in Alabama were making and marketing sweet cream butter. The larger portion of the product was marketed at curb markets, while some farmers sold their product through merchants and still others marketed direct to the consumer. This product is selling at curb and other markets at a premium of from 5 to 10 cents per pound over creamery butter.

A cream separator is used in the process, the machine being equipped with special low-cost parts. The cream produced will test between 70 and 75 percent butterfat. F. W. Burns, extension livestock specialist, says, "The cost of the parts should not exceed 25 or 50 cents; they can be made by the farmer. One is a regulating cover for the small cream hole in the separator, and the other is a cream spout which has more slope to facilitate the flow of the heavier cream."

Butter made in this way will test, after working, between 80 and 85 percent butterfat. Butter can be made from the warm milk in 30 minutes, and it will score 90 to 92.

The amount the farmer produces is governed by the milk production on his farm. One farmer in the State is producing several hundred pounds of this butter each week, marketing it at several different markets.

The ease with which the butter may be made and the tastiness of the product have increased its popularity with producers and consumers alike.

Federal Milk License in the Boston Market

THE Federal milk license became effective in the Boston market on March 16, 1934, and all distributors handling fluid milk for consumption in the Greater Boston market may continue in business subject to the terms of the Federal license. The terms of this and other milk licenses are established after consultation with the important producers' organizations interested in the market. In fact, there would be no license if the producers did not request one.

The purpose of the license is to benefit the milk producers whose milk is consumed in the Boston market. It will prove its worth in so far as it supplements the work of the cooperative organizations and helps them to attain certain goals which have been difficult to reach in the past.

The point in all licenses which immediately attracts the attention of the public is the fixed price to producers. In the Boston license the price established for fluid milk was \$2.95 per hundredweight, f. o. b. railroad delivery points in the Greater Boston market, for milk containing 3.7 percent butterfat. This is approximately 6½ cents per quart and represented a substantial increase in the then existing price to producers. This price applies only to milk which is consumed in its fluid form. There are two classes of milk in the Boston market—class 1, or fluid, and class 2, or milk which is consumed in the form of cream. The price for class 2 is based upon the market quotations for fluid cream in the Greater Boston market. On October 1 the class 1 price was increased from \$2.95 per hundredweight to \$3.26 per hundredweight, while the class 2 price continued to be based on the current market quotations for cream.

Equalization

Although both producers and the public think of this price as the important fact in connection with the Federal license, probably the most outstanding undertaking is the so-called "equalization" feature. Briefly, this makes each distributor bear his share of the class 2, or in the Boston market, so-called "surplus" milk. In the past there have been times when the composite price (the price made up of both class 1 and class 2 prices) paid the farmer by different companies, varied nearly 2 cents per quart or 90 cents per hundredweight, due

solely to the volume of surplus handled by the different dealers. For example, in a market which has a 50 percent surplus when its entire supply is considered, some dealers might handle as little as a 20 percent surplus, while others might have 70 percent or more. Thus the producer's price was affected materially by the dealer's practice in handling surplus milk. Under the equalization, if the market has a 50 percent surplus, every producer is paid on this basis. The dealer who handles a smaller share of the surplus than the market average pays into an equalization pool, or fund, the difference between the price based on the market surplus, and the price based on the actual surplus handled by him. On the other hand, the dealer who is carrying more than the market surplus pays his farmers the market price and depends upon a payment from the equalization pool, or fund, to reimburse him for the difference between this price and the relatively low price based on his actual amount of surplus.

Important Undertaking

This is an extremely important undertaking in the Boston market. For a number of years attempts have been made to get all producer elements in the market on a basis which prevented one from undermining the other in the competition for fluid milk sales. It was common practice for a group carrying a large percentage of surplus to sell fluid milk at a cut price, since by so doing it could return a higher price to its producers. For example, a cooperative or a privately owned company with a heavy surplus which was selling for \$1 per hundredweight, while class 1 or fluid milk was selling for \$2 per hundredweight, could improve its income by moving as much of the surplus as possible for, say, \$1.50 for fluid purposes. This would cause other handlers of milk to reduce their prices to prevent the loss of their fluid sales. Often the low price of milk in the Boston market was due to the destructive competition between producing elements.

The Federal license has recognized the principle of equal distribution of surplus and has eliminated the possibility of a group's undercutting the recognized fluid price in order to reduce its volume of class 2 milk. Many who are familiar with milk marketing in New England

believe that this accomplishment is by all odds the outstanding contribution of the Federal license in the Greater Boston market.

Along with this, of course, is a complete audit of the distributor's books. Attempts to audit the market are not new. Some of them have been reasonably successful and have covered a large percentage of the milk sold in the market. The Federal license has greatly improved this work, which is the basis for the equalization payments.

No discussion of a Federal license in a milk market which uses a base rating plan would be complete without some mention of the producers' bases. Nothing except price affects the producer so vitally as the base he obtains. Under the Federal license all producers whose milk is sold for consumption in the Greater Boston market have a base. The Boston license differs from most in that it recognizes a base for the various cooperative organizations. This base is the summation of the individual bases granted producers who are members of these organizations. The market administrator pays the organizations upon these bases. The organization may in turn reestablish bases among its members. However, this action in no way affects the payment due the organization from the sale of its milk.

Equity Among Producers

It is highly important that bases reflect real equity among producers. Equity among producers is extremely difficult to determine in a highly complex milk market. One of the criticisms of the Federal license has been its rigidity in matters such as bases. In the Boston market a considerable degree of flexibility has been developed. For example, producers whose milk is delivered directly to the distributors' plants in the city have been given bases representing 85 percent of their deliveries during the base period, while practically all other producers have been given a base representing 61 percent of such deliveries. This recognizes the adjustments which producers near market have made in the past, and also recognizes that due to their location they have certain advantages which any price plan must take into consideration. There are some producers who have obtained bases other than these two percentages, depending

upon their location and their actual performance in the past. A producer can have his base changed if sufficient evidence is available to show that such a change is justified.

Another feature in connection with bases is that a producer must deliver 75 percent or more of his base through any four consecutive "pay periods" if he is to maintain his base. The pay period in Boston is half a month. This gives the producer an added responsibility in supplying the market as compared with the usual practice in the past.

Producer-Distributors

One of the difficult problems in the handling of any milk market is fair treatment of producer-distributors, or men who both produce and peddle their own milk. These men have always been independent of any marketing plan. They have had no base-surplus experience and their price experience has been an individual matter. Their business is conducted under different conditions than those of the so-called wholesale producer. At the present time in the Boston market a producer who sells his own milk and does not buy from another producer is exempted from the equalization pool up to 250 quarts per day, which is about the average retail wagonload in the market. Above this amount, his sales must be equalized with the remainder of the market. There are many reasons why a complete equalization of a producer-distributor's sales is unfair, and there are many arguments to show why he bears some responsibility to the market as a whole with regard to the amount of surplus which is carried by other agencies. There is no one problem which is more difficult to handle fairly and which is generally conceded by those working with the licenses to be more open to change and adjustment than the handling of producer-distributors.

Since the purpose of the license is to benefit producers, the following table of prices in 1933 and in the comparable periods in 1934 give some indication of its success. The following figures have been published by the market administrator:

Net prices per hundredweight received by producers for all milk in the Boston market

Month	1933	1934
March 16-31.....	\$1.12	\$1.79
April.....	1.13	1.70
May.....	1.15	1.60
June.....	1.35	1.59
July.....	1.45	1.75

The market administrator states: "Since the deliveries of milk by producers during these 4½ months under the license have exceeded 2½ million pounds per day, the total increase in the net income of the producers during these 4½ months as compared with the same period in 1933 is in excess of 1½ million dollars."

The license has brought into existence new conditions. Persons interested in milk marketing have had to adjust their thinking. Among the leaders in assisting the public to understand these new conditions have been the extension economists in the New England States. Several have greatly assisted both farmers and consumers to understand what the license is and what it attempts to accomplish. The continued operation of the Federal milk licenses will open a wider field and a greater need for the trained marketing specialist.

Farmers Form Truck Marketing Association

Extension workers have aided a group of truck growers' associations in the southern part of Arkansas in working on a market development program during the past 3 years. The sponsors had in mind the threefold purpose of improving quality, securing greater bargaining power, and advertising products of the area among the trade. These associations formed a federation known as the "South Arkansas Truck Growers' Association", and adopted the "Pine Cone" as a uniform brand. Products have been shipped the past 2 years, and members have received prices averaging substantially above those prevailing in nearby markets.

A number of the associations have purchased cars of certified seed cooperatively and effected a saving, as well as improving the quality of the crops produced. Sweetpotatoes, potatoes, and tomatoes are the main crops shipped by growers of this area. The sales contract is made early each year with a reliable sales agency to handle car-lot sales. The managers of member associations also have the privilege of making sales to local buyers if the occasion warrants.

A 4-H club potato marketing project was sponsored by the extension service in Saline County. A number of the club boys who had commercial potato plantings as projects enrolled in a county organization for uniform production and marketing of the crops under the direction of the county agent. Good seed

of one variety was obtained and planted at about the same time, and similar cultural methods were followed. As a result of these uniform methods, the crops matured about the same time and were of superior quality. They were carefully harvested, preventing bruises and sun scald. The potatoes were packed in branded bags and shipped to the central market. Due to superior quality, this car brought 5 cents per hundredweight above the quoted top in the market in which it was sold and netted 25 cents per hundredweight more than potatoes were bringing in the home market the day the car was shipped.

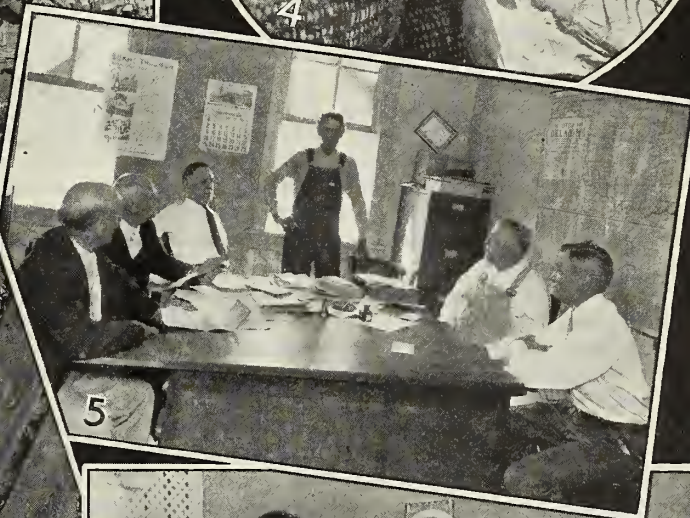
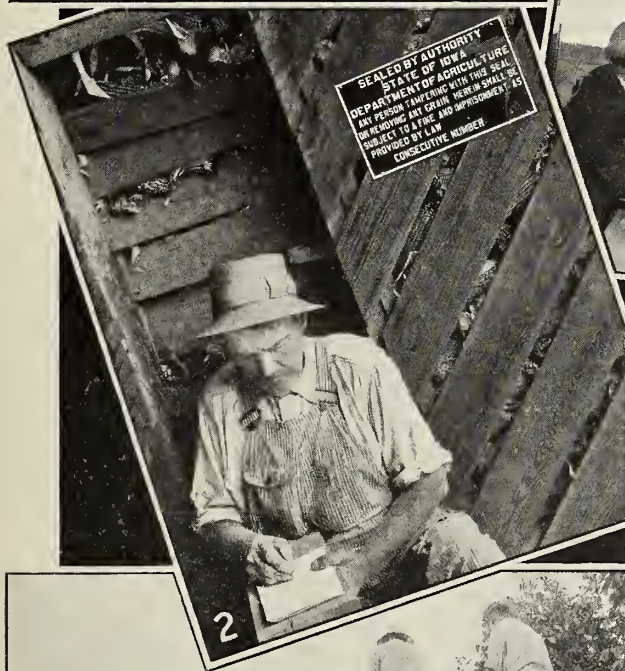
A production and marketing improvement program, which was started 3 years ago, is being carried on in Franklin and Logan Counties. Progressive farmers realized that the growers producing better than average quality potatoes were not getting paid according to real value as their crops were being mingled with those of lower quality, all receiving the average price. Associations were organized of potato growers who agreed to follow recommended production practices and load and sell their potatoes cooperatively at harvest time.

The prices received by these associations have averaged well above those of nearby cash markets every year, according to J. H. Heckman, Arkansas marketing specialist. Numbers of inquiries have been received from members of the trade who handled these cars. Because the high-quality product satisfied the customer and the branded bags told where to locate the producer, the products of 1 year are helping to sell those of the next, Mr. Heckman points out.

THE Louisiana Potato Association shipped 6,000 bags of certified seed potatoes to Cuba. The association believes in salesmanship so members made a tour into Florida to find possible markets for surplus certified seed potatoes. George L. Tiebont, Louisiana extension horticulturist, served as technician on the educational and sales promotional tour.

FOUR 4-H club members of Montgomery County, Tenn., made history for their county recently, when they cooperated in the sale of the first carload of black walnuts ever shipped from the county. Eighty-three boys delivered 31,000 pounds (600 bushels) of hulled walnuts, for which they received \$300 in cash. The firm that purchased the nuts has wired an order for another car.

Along the Highways and Byways of Adjustment



- 1 New Mexico farm home which the Agricultural Adjustment Administration benefit checks helped to build.
- 2 An Iowa farmer figures his profits on sealed corn.
- 3 California tokay grapes shipped under Agricultural Adjustment Administration marketing agreement.
- 4 The metal tag shows this cotton comes within the Bankhead cotton allotment.
- 5 An Oklahoma debt adjustment committee saves a farm from foreclosure.
- 6 Texas farmers receive their benefit payment checks.

A County Consumer Council at Work

THERE are indications that the county consumer council of Maricopa County, Ariz., will be able to justify its existence as a part of the National Emergency Council during the coming months, due to the opportunity for growth through service which is apparent to its members.

The council came into actual being June 28, 1934. The council members agreed that apparently the first need of the group was information about the purpose of the council, its potential service to the community, and its field of operation. As an outgrowth of this feeling came a plan whereby at each meeting, the chairman provided a speaker from the different code authorities who gave information as to the progress of that particular code in Maricopa County. There was general agreement among council members that these informative talks proved highly valuable.

Coincidental with this phase of activity for the members, the council began active work on committees designated by the county chairman. Four such committees now function — organization, standardization, price and complaint, and publicity.

The standardization committee and the price and complaint committee may have functioned more actively than other committees because they possess greater potential value in actually solving consumer problems.

The standardization committee attacked a pertinent problem, the investigation of standards of canned fruits and vegetables in the local stores. The members of the committee reported excellent cooperation from merchants.

The appraisal made by this committee indicated the need of more informative labeling and a request of this type was made direct to several national canners.

The next step for the standardization committee was an inquiry on standardization in the dry-cleaning industry in the county.

Activity of the price and complaint committee, planned and directed by the county chairman acting in the absence of the chairman of the committee, has consisted of a survey of local prices as applied to certain commodities. This information will be released to the county council after an analysis of results. An

County consumer councils are being organized through the National Emergency Council for the education and protection of the consumer. These organizations are made up of local people who have become aware of the dilemma of the consumer and are willing to work with others in finding solutions to local consumers' problems. County extension agents are often members of this organization since its achievements will help farm families as consumers. An active county consumer council in Maricopa County, Ariz., is described in the following article by Grace Ryan, home demonstration agent.

additional activity of this committee has been the successful adjustment of definite consumer complaints.

Publicity progresses through the channels of the local and State press. The chairman of the publicity committee indicates cooperation from a theater in the nature of a film depicting the members of the council on a tour of inspection of local business houses.

Organization of branch councils may follow at the discretion of the county chairman who has appointed a committee to make a survey of the need for such groups in the county.

Such, then, is a résumé of the initial activities of the Maricopa County Consumer Council. There is evidence of a growing interest on the part of merchants and general consumers. Each member of the council senses the need for a constructive and unified effort to make the council function efficiently. Each senses, too, the opportunity for service. In the minds of members is a pertinent question as to the expedient type of service to be rendered.

The writer believes that there is an unlimited opportunity in the field of direct-consumer education. There are many mediums for this service, such as established organizations of consumers, homemaker groups, educational agencies, and radio contacts. It seems distinctly putting the "cart before the horse" for any group to seek to adjust the consumer to the complexities of the existing system without first having helped him get a birdseye view of his status in the economic set-up. Education of each and every consumer should be one of the first duties of the council.

Groundwork for such an educational approach has been laid in Maricopa County since 1930, through the efforts of the Arizona Agricultural Extension Service. Groups of farm women have met with the home demonstration agent and made a study of consumer problems and of goods and services available on their local markets, and of the market machinery. Information has been given

them regarding the serious problem of consumer behavior, with reference to co-operation with the merchants of their communities, in an effort to correct some of the abuses practiced by the unthinking consumer. The

factual material and services which the county consumer council has to offer would fall on more fertile ground if practical educational appeals were made through every possible avenue.

It appears that there is little question that the consumer council has a definite service to render to the consumers of Maricopa County, the value of which will probably be in direct proportion to the degree of mutual understanding which the agency can stimulate among producer, distributor, and consumer.

MOST of the tenants in Wilson County, Tex., are Mexicans. Just a few years ago their diet consisted of tortillas, frijoles, and carne, with the bulk of it bought with money advanced by the landlord on a monthly basis. Now, with the advice of county agents, scores of them grow vegetables, including beans, carrots, beets, peas, potatoes, sweetpotatoes, and other articles of produce on their farms. Landlords find that they have been able to reduce their advances to these tenants by at least half, leaving the tenant with a smaller indebtedness in the fall. Many of these Mexicans, in addition to their garden, have obtained a milk cow and a pig or two. The effects of the program are very evident in the appearance of the children, whose general health is much improved by the more varied diet.

NEW JERSEY poultrymen are registering their flocks with the State police, and receive in return a register number. This number they are tattooing upon the wing of the birds. One hundred and twenty-two poultrymen in 18 counties have tattooed 104,842 chickens, ducks, and turkeys. This work is carried on in an attempt to reduce losses from stolen birds. The number is a positive identification of the birds and aids in obtaining a court conviction in case of theft.

Benefits from the Farm Viewpoint

A farmer in Illinois and a county agent in Indiana offer their views on the Agricultural Adjustment program

How I Look at Adjustment

HERE in La Salle County, Ill., 55 percent of our crop acres in the last 2 years were planted to corn, so when we speak of agricultural adjustment, we think of corn and hogs. We had 3,360 applications for corn-hog contracts, and it is interesting and significant that of this whole number, there were only 35, or about 1 percent, that could not or would not go along at the time of final signature.

Under the corn-hog adjustment plan, our contract signers rented over 61,000 acres to the Secretary of Agriculture, and altogether the benefit payments on corn and hogs will bring into the county about \$1,100,000.

We are in the area that was hard hit this year by drought and chinch bugs. On a great many farms in the county there will be no grain to sell, and on some farms not even enough to feed the livestock. To such farmers the corn-hog payments are a godsend; they constitute the only cash income the farm will know this season. This together with the release of the contracted acres for forage production furnish a splendid illustration of the good this program can do in providing a form of insurance against such emergencies.

Corn Loans

Last spring our farmers sealed about 3,000 cribs containing more than 5 million bushels of corn, receiving a loan of 45 cents per bushel at that time. More than 3,000,000 bushels of this corn have now been sold, at least two-thirds of it for 60 cents per bushel or more, and much of it for 75 cents per bushel. There can be no doubt that without the corn-sealing plan, a great deal of this corn would have been sold last winter for 25 or 30 cents per bushel; the year before it was 18 cents per bushel. The corn loan brought this added price to the farmer instead of the speculator, and kept the corn in the country where much of it is going to be needed for feed through the coming winter.

Business Ahead

Just the other day, I went to see a carpenter in the nearby village to get him to make some repairs on my corn-crib before husking. Imagine my sur-

prise to have him tell me that he had more work engaged than he could do in a month. For the last 3 years he has spent most of the time just tinkering around home. Now the farmers who had corn to sell this summer have a few dollars that they can spend for some of the repairs that have been needed for a long, long time, and the whole community benefits by the money being spent.

Our farmers are not soon going to forget the lessons learned in the adjustment program. Many of them have realized before that a more moderate production of the basic crops would bring in a greater money return. But always before when an effort was made by any number of farmers to cut down on the acreage of any crop, a lot of other farmers would think it a good time to increase, and so the effort to balance production with demand would be defeated.

A Lesson in Cooperation

We have in this adjustment program a wonderful lesson in the power of co-operative effort in fitting our production to the demand.

We know that this could not be accomplished in such an industry as agriculture without beneficial legislation. We know that the administration of the adjustment program has not been perfect. Some mistakes have been made which can be avoided in the future.

But with the hope and confidence that the experience of this year will help in changing these objectionable features, our farmers have voted by more than three to one, for an adjustment program in 1935.—J. V. STEVENSON, Ottawa, Ill.

What Adjustment Has Meant to Our County

It is a fact that La Porte County farmers and landowners have received 1,449 Government corn-hog checks which totaled \$119,200 and more than 500 wheat adjustment checks which amounted to \$30,000. Before the present contracts expire our county will receive approximately \$370,000 in adjustment payments. However, there are other values which might be even more beneficial to our farming business than this cold cash.

Our county is situated at the lower end of Lake Michigan. We grow about

67,000 acres of corn, 32,000 of wheat, and a similar acreage of oats per year. We are well situated for the marketing of these grains as well as for the marketing of \$400,000 worth of hogs and \$730,000 worth of dairy products. Normally, we have a surplus of grains for our livestock. Due to the drought this year the grain crops yielded only one-third of normal. This winter we will have to ship in thousands of tons of grain, or let our animals go hungry. Adjustment payments will help purchase some of this feed. These facts are mentioned because they must be considered in deciding what the adjustment program has really meant to our county. The contract signers produced 25 percent fewer hogs, about 22 percent less corn, and 20 percent less wheat acreage. This resulted in the freeing of 15,000 acres from grain production, which were used mostly for soil-building leguminous crops, such as soybeans, alfalfa, and sweetclover.

La Porte County has passed through the most serious drought in our history, but fortunately the thousands of dollars in adjustment payments have acted as insurance to compensate our farmers for the poor crops. This is true because the base period for the contracts were normal years. The corn-hog contracts as well as the high price of corn compared to the low price of hogs greatly helped to reduce our hog numbers to more nearly match our supply of corn. Since the Government released the acres taken out of grain production for pasture and hay, we have had much more pasture and will have much more hay, including 4,000 more acres of soybean hay, for this winter than if we had no adjustment program at all.

Benefit Payments

Now let us consider what farmers have done with all of this money which they have received in order to make it possible for them to afford to adjust their production to demand. Recently this question was asked before a group of nine corn-hog and wheat contract signers. One reported he immediately used his check to pay the premium on his life insurance, which would otherwise have gone delinquent. Several reported they used it for paying their interest and taxes. The largest wheat check that came to our county was used to pay

delinquent taxes. The existence of the contracts also provided credit for many farmers to finance their operations until adjustment payments arrived.

However, the four points which will total of higher value than the cash received are as follows:

1. The reduction in the number of brood sows resulted in the more rigid culling of the breeding herd and better feeding and management of the pigs, with cheaper cost of production and a higher quality of product.

2. The program resulted in better land utilization because of more pasture and hay acreages, a result which should ultimately raise both our livestock and grain prices. The reduction of corn and wheat acres encouraged our farmers to use only the most productive acres and the best of seed with the result that they harvested a higher yield per acre at a cheaper cost per bushel. The increasing of production per unit and improving the quality of farm products have always been aims of our county programs of extension work.

3. The national program has raised the price level of our products for sale until it is nearing the 1910-14 parity price.

4. The program has taught us as farmers that we can cooperate to help solve our economic problems to improve our welfare, and increase our purchasing power for buying the things we need for our homes and families. One of the biggest results of the adjustment program in La Porte County is that we have learned better how to work together. We made a united effort to do a big job and succeeded. This experience will make us better qualified to meet the big problems of the future, which must be solved if we are to raise the general standards of living on the farm, the aim of the present Agricultural Adjustment Administration and the cooperative extension work which we have carried on for years.—O. W. MANSFIELD, County Agent, La Porte, Ind.

MASSACHUSETTS 4-H club members and leaders are keenly interested in the contest recently opened by the 4-H department of the Massachusetts State College to obtain 4-H plays. George L. Farley, State leader of 4-H club work, has announced that the contest will be divided into two parts, one for 4-H boys and girls and the other for 4-H leaders. The winner of each contest will be awarded as a prize a week at Camp Gilbert, the 4-H State club camp, next summer.



The live-at-home idea is spreading among the negroes of the South. In Alabama 95 percent of the negro farmers working with extension agents have grown sufficient food and feed for their own use. The Mississippi tenant farmer shown above milks his own cow and grows his own garden.

New Negro Agents

TWENTY-SEVEN negro farm demonstrators have been added to the staff of the Alabama Extension Service by a cooperative agreement. These men are working in counties having a high negro population and not having a regularly employed county extension worker. They have been chosen upon the recommendation of the extension office and are paid from funds of the Federal Emergency Relief Administration in the State.

While these men are hired by the relief administration they are responsible to E. C. Dobbs of the negro extension work at Tuskegee Institute, and to the local work director of relief. The men employed in this rural rehabilitation work act as instructors to farm families on relief rolls, aiding in improving general farm practices through improved methods as recommended by the Extension Service. Not only will they teach improved agricultural and home-economic methods but they are devoting considerable time to new sources of income from home industries.

The 27 negro farm demonstrators are located in 16 counties and the distribution of their numbers is based upon the number of negro families on relief rolls within the county. A very definite plan of work for these farm families has been suggested and outlined with very definite extension background. The outline includes both men and women of the family.

The personnel of these workers is taken from lists of unemployed gradu-

ates in agriculture and home economics. Mr. Dobbs in a report to T. M. Campbell, field agent in negro work for the Extension Service, says, "At least 95 percent of the families now being supervised by these farm demonstrators have been able with the use of oxen, mules, and other equipment furnished by the Federal Emergency Relief Administration, to grow sufficient food and feed to supply their families and livestock for the coming year, most of them having some to spare."

The Beef Cattle Situation

(Continued from page 178)

and Wisconsin. Applications for testing 800,000 head for Bang's disease have been made by their owners in these and other States.

Regulations governing the mastitis plan have not yet been completed. Under the plan the elimination of cows will be limited to those showing marked physical evidence of mastitis. This work will be supervised, as is Bang's disease testing, by the Bureau of Animal Industry, in cooperation with State livestock sanitary officials. The same rate of Federal indemnity which is paid for reactors to the tuberculin test, will rule in the Bang's disease and mastitis work. For a purebred registered animal, the maximum is \$50 and for a grade \$20. Salvage values also will be received by the owners.

Reading Clubs Established

READING in the farm home is one of the minor projects in the extension program for North Dakota. The director of the State library commission generously offered her assistance in preparing and presenting such a project. Miss Cook, the director, had done some work of this nature in connection with city women's clubs but had very little experience with rural women. Inez LaBossier, North Dakota extension specialist in clothing, drawing from her background of experience with rural women, assisted Miss Cook.

The project was started in three counties, first, because they were on Miss Cook's schedule; and, second, because they had home demonstration agents in the counties who could closely supervise the work. There were 43 women's clubs in the 3 counties with a total of 741 members.

Local leaders were sent to a series of training schools. The first meeting was a discussion of reading in general, reasons for reading, why people read, what they hoped to get from reading, the physical make-up of books, and building the home library. The second meeting dealt with reading for adults, the types of reading suitable for the adult mind being discussed. An effort was made to adjust this material to the various levels of the individual club members. They were urged to read books of a higher type than those to which they were accustomed, thus raising their own levels of appreciation and enlarging their previous experience with books. A "book menu" was suggested and discussed. All types of books were included in this "menu" so that each member of the group would be sure to find something which suited her needs and tastes. The third discussion took up books for children and discussed suitable books for ages, types, and interests for all the younger members of the family. The methods of creating children's interest in reading, how to supervise their reading, and how to guide their selection of books were some of the points which the mothers greatly appreciated. Many of the women stated that they found this discussion most helpful since it enabled them to select their child's reading material with greater confidence and to guide the child more carefully in the formation of his reading habits.

The State library commission cooperated in lending books to the home makers' clubs. The books were made up in packets to meet the needs of the entire family reading circle. In some of

the towns where some library facilities are available books have been lent to rural readers with the same privileges extended to the local town people.

During 1932-33 the reading service reached 741 club women, 231 women who were not members of clubs, while the total, which includes children and other members of the family, was 1,210. Two hundred and fifty-three families are reading more magazines, 250 families are exchanging magazines, and 258 homes have arranged to exchange books. More than 200 women believe that they are better able to supervise their children's reading as a result of the project. During the period, 1,760 books were obtained in cities and in the State for this service.

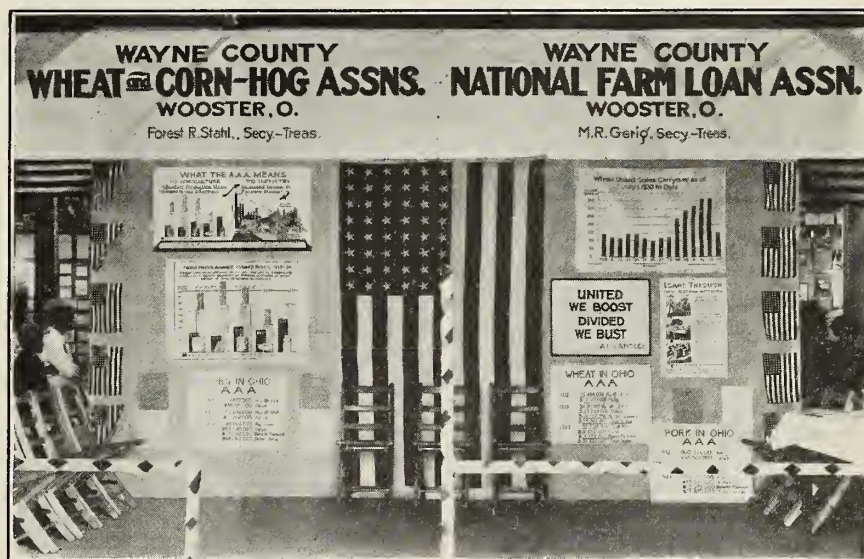
In 1933-34, the second year of the project, the work is being expanded to include five additional counties. The subject-matter material has been revised and new and additional book lists have been made for the new year. One hundred and ten clubs are enrolled in the eight counties which took part in the project during 1933-34.

Leaders and older 4-H club members have been invited to take part in the activity although it is felt that a special project should be worked out for this group.

THE relief canning program and activities in Clackamas County, Oreg., were carried out in two canning centers, equipped under the supervision of the county home demonstration agent. Various relief agencies aided in the enterprise. These two centers were open free to the persons on relief rolls and to others at a very small charge. The products which were canned consisted of vegetables, meats, and fish. Two hundred and twenty-eight people used the canning centers and canned 39,286 quarts of food valued at more than \$7,933.

In addition to this activity, the extension agent spent much time in other educational work, including demonstrations of drying equipment for fruits and vegetables and other methods of food preservation.

ARANGE-MANAGEMENT course is being offered for the first time as a home-study course by the North Dakota Agricultural College. There is an increasing interest in land uses, erosion control, forest planting, returning more acres to pasture, and similar problems of the range which this course will cover. As another indication of the present trend in agricultural thought, it will be of much interest to county agents, foresters, and farmers.



THIS booth attracted a great deal of attention at the Wayne County, Ohio, fair. It was erected by the Wayne County Wheat and Corn-Hog Association and the Wayne County National Farm Loan Association at a cost of less than \$10. Some of the chart material came from Washington and some material reflecting local conditions was made locally. The paid attendance at the fair was 50,402, which was the largest in 85 years' history of the fair. Thousands of farmers examined the charts. The local wheat association has about 1,000 members, the corn-hog association 600 members, and the farm loan association, 350 members.



Stedman Retires

John Moore Stedman, specialist in the Office of Cooperative Extension Work, United States Department of Agriculture, retired from active service on November 30, 1934, after 25 years with the Department. Following his graduation from Cornell University in 1888, Mr. Stedman entered the field of teaching, first in Cornell University and later in Trinity College, N. C., Alabama Agricultural and Mechanical College, and the University of Missouri. While at the University of Missouri as professor of entomology and working with the experiment station in the capacity of entomologist, he became associated with the early farmers' institute work of that State, and in 1909 he came to the Department of Agriculture to take charge of that work which later merged with the newly developing Extension Service. For a number of years Mr. Stedman made a feature of reporting the development of extension work in foreign countries. Recently he has been associated with the section of extension studies and teaching in the development of a program of extension research. Mr. Stedman has published many papers on biology and entomology, as well as on various phases of extension work. He is a member of the American Association of Economic Entomologists, Entomological Society of Washington, Entomological Society of America, American Association for the Advancement of Science, St. Louis Academy of Science, and Sigma Xi.

COUNTY extension workers in Alabama have held, since September 1, 1934, a total of 797 meetings on the cotton informational program, with an estimated attendance of more than 110,000 people.

Carrying Cotton Facts to Georgia Farmers

COUNTY agricultural agents and teachers of vocational agriculture have united their efforts to carry to every cotton producer in Georgia vital facts on the cotton situation. The extension workers in the State have held 1,500 community meetings with an estimated attendance of 75,000 in the period between November 1 and December 15.

Hart and Jefferson Counties are representative of counties throughout Georgia in the way in which they have carried on their educational programs in connection with the cotton plan.

In Hart County the county agent, L. C. Westbrook, and the 7 vocational teachers have held 73 meetings at which the cotton situation has been discussed. Included in this number were the evening classes held by the teachers. More than 900 farmers had the various phases of the cotton program, including the Bankhead law and replacement crops, explained in detail. This number is approximately 75 percent of the farmers in the county.

The office of county agent, Gordon H. McGee, in Jefferson County has been continually crowded with farmers making inquiries regarding the program for cotton production and its various phases. The county agent and teachers cooperated in holding meetings in every community in the county, 708 farmers having attended the 8 meetings. These were in addition to the evening classes held by the teachers with the cooperation of the county agent.

In Jefferson County, a circular letter was addressed to the leading farmers of the county and they in turn were requested to notify their neighbors of the series of meetings. An article was placed in the county newspaper calling attention to the series of conferences, giving the date, time, and meeting place.

In both of these counties, as in most Georgia counties, the county agents and teachers have obtained information for presentation in the cotton house organ, "Cotton Production Adjustment", and from other bulletins and circulars of the cotton section. In addition, local information has been assembled and used at the meetings.

In all of the meetings the farmers have been active in the discussions, bringing up questions of importance in determining their attitude toward the program.

The county agents report that those already in sympathy with the program had become more convinced that they

were taking the right position, and most of those who came to the meetings to oppose the program changed their attitude when the facts were placed clearly and concisely before them.

In Jefferson County, eight men, including the county agent, made a survey of opinion concerning the retention of the Bankhead law. During the course of 1 day they contacted 443 farmers; 410 of whom signed a petition expressing themselves as favorable, and only 33 were opposed to continuing the law. The canvassers were instructed not to attempt to influence the farmers in their statements. "The large portion in favor of the law may be taken as evidence of the value of the educational meetings", says County Agent McGee.

Another benefit which has come from the meetings is that of relieving the load upon the county agent's office staff. Farmers have been satisfied by the discussion of the program and situation as presented at the meetings and night classes. A great deal of the uncertainty on the part of farmers has vanished.

In Hart County the discussion of replacement crops for the rented acres added impetus to the crimson clover seed production project already under way in the county. The area devoted to this crop has greatly increased and it has become one of the county's principal cash crops. Crimson clover is now a fixture in the county not only for seed production but as a soil-building crop.

AT THE fourth annual 4-H club rally day held in Sullivan County, Tenn., there were 820 club members and local leaders present. The rally was sponsored by the agricultural committee of the chamber of commerce. County school busses delivered the boys and girls to Anderson Park, Bristol, where they were given 4-H caps and organized for a parade, led by the Bristol High School Band. The parade was followed by a meeting at which attractive prizes were awarded to members doing outstanding work during the year.

THREE new recordings of 4-H club songs have been made: "Pride O' the Land, the national 4-H club march, by Goldman, is a Brunswick record; no. 6967. The Plowing Song and Dreaming, both by Buchanan and Parish, have been recorded by Victor-R. C. A. on record no. 22455.

Arkansas Home Demonstration Councils Active

COUNTY home demonstration councils in Arkansas are gathering a momentum which is making itself felt among rural women. These county councils and the State council, which meets each year, are helping to make the views and opinions of farm women articulate and to bring to them information of current developments which affect the home. The county councils include representatives of each of the community home demonstration clubs in the county, which meet from 1 to 4 times a year to discuss and support the local program for the home.

The newer developments in agricultural adjustment and other phases of the recovery program are coming in for their share of discussion to keep the program in line with changing conditions. The live-at-home program is always the central theme with its effort to raise the standard of living. Old-fashioned community recreation activities are interesting the women, and they are discussing and studying ways and means for recreation at the county council meetings. Relief is also a current problem and co-operation with the established agencies to relieve suffering and help farm women to help themselves is a live topic for discussion and planning.

One-third of the farm women in Arkansas are members of home demonstration clubs and send representatives to the county councils. During the 6-month period from December 1, 1933, to July 1, 1934, 55 councils held 106 meetings. An average of 112 women attended each of these meetings. A total of 11,780 women delegates representing 829 communities took part in the council discussions and helped plan the program for the coming quarter or year.

The State council of home demonstration clubs has for the past 2 years met with the State rest camp held at the National Guard camp 11 miles from Little Rock. The camp staff and crew of workmen are also lent to the more than 1,200 women who fill the camp to capacity. Each woman pays 50 cents toward the cost of cooking and \$1.50 for meals unless she brings her groceries from home.

The council hears reports from each of the 57 county councils represented. The women conduct debates on vital questions of the day, hear men and women prominent in science and Government discuss important topics with which they are working and indulge in much

serious discussion. Assembly singing, quartets, plays, and dance numbers also take their place in the program. Other camp activities such as games, archery, swimming, a song contest among counties, a water carnival, and home industries and handicrafts add much to the good time at camp and give the women many new ideas to carry back to their county councils and their home demonstration clubs.

The camp not only pays its way but has a surplus in the treasury each year. The executive board of the State council voted to offer \$50 in cash prizes to the 10 county councils staging the best fall garden show. Every county held a fall garden show in connection with the annual home demonstration achievement day. These prizes added much to the interest of the occasion.

Two Department Officials Honored

At the Ninth Annual Convocation of the National Honorary Extension Fraternity, Epsilon Sigma Phi, held at the Willard Hotel in Washington, D. C., on November 21, 1934, by unanimous vote there was conferred upon Hon. M. L. Wilson and Dr. C. B. Smith of the Department of Agriculture the distinguished service ruby, this being the highest honor of the fraternity. This is the first time in the history of this organization that more than one such award has been made in a single year.

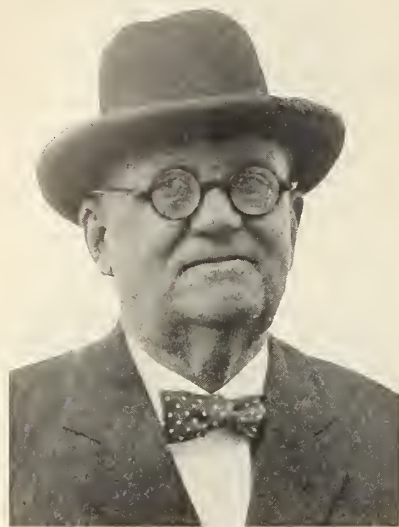
Assistant Secretary Wilson, a native of Iowa, began his extension career in 1913 as county agricultural agent in Dawson County, Mont., being the first county agent appointed in that State. He became county agent leader in Montana in 1914, in which capacity he served until 1922. He and Director F. S. Cooley were responsible for the rapid development of extension work in that State. From 1922 to 1924 he was extension economist in Montana and came to the Department of Agriculture in 1924 as chief of the Office of Farm Management, returning to Montana in 1926 as chief of the Department of Economics and extension economist. He was responsible for the development of the domestic allotment plan of agricultural adjustment, and when this plan was enacted into legislation by the Federal Congress he came to the Department at the request of

Secretary Wallace to head the Wheat Section of the Agricultural Adjustment Administration. In August 1933, he was appointed director of the Division of Subsistence Homesteads of the Department of the Interior, and in July 1934, he was appointed to his present position as Assistant Secretary of Agriculture.

Dr. Clarence B. Smith is a native of Michigan. He came to the Department of Agriculture in 1896 as accountant and abstractor in the Office of Experiment Stations. In 1907 he was placed in charge of the Section of Field Studies and Demonstration of the Office of Farm Management of which Dr. W. J. Spillman was chief. With the passage of the Smith-Lever Act in 1914 he was made chief of the Office of Extension Work, North and West, and as such made valuable contributions to the organization of extension work in the 33 northern and western States. Perhaps Dr. Smith's greatest contribution to extension work during these years was his insistence that extension work be put on a sound farm-management basis. He was a real pioneer in the field of applied agricultural economics. He sought in every way to see that the programs of the county extension agents were based on sound information. With the consolidation of the Office of Extension Work in the South and the Office of Extension Work in the North and West in 1921 he became chief of the new Office of Cooperative Extension Work. In 1932 he was made Assistant Director of the Federal Extension Service, in which capacity he still continues.

AT LEAST 345 farmers in Webster County, Mo., produced sufficient legume hay for their home needs during 1933, which is a 50-percent increase over the 1932 record. More than 445 farmers produced drought-resistant pasture for their herds of cattle, pasture being provided for at least 4,304 cows. It is estimated that \$10,000 worth of dairy feed was produced by 240 dairymen raising late-fall and early-spring pasture from wheat, rye, and winter barley.

APPROXIMATELY 85 percent of the world's supply of redtop seed is produced in 12 counties in southern Illinois. During the 12-year period 1922-33 approximately 204,000 acres have been harvested annually for seed, the average production per acre being 54 pounds. Extension workers in the district have been active in promoting this project and have issued a bulletin on the subject.



Director Long

"Born of the landed gentry of North Carolina, polished in the chivalrous courtesy of old Virginia, and living his more mature years in the finest traditions of

South Carolina, W. W. Long was a true friend, a noble gentleman, a prince among his peers, and a lover of all humanity." Thus did his coworkers in extension speak of the sterling character of the man.

W. W. Long had been director of extension work in South Carolina for 22 years. Under his able leadership, South Carolina has steadily advanced to the front ranks in all lines of agricultural efficiency. Previous to his position in the Palmetto State he had spent 20 years as a servant of the people in the United States Department of Agriculture. Director Long began his public service before his twenty-first birthday in the Legislature of North Carolina and later served in the internal revenue department of that State before coming to Washington in 1893.

Dr. Long died at his Clemson College home November 13 following a stroke which came upon him while actively at the duties of his office on November 12. He rests on the beautifully wooded knoll overlooking the Clemson College campus.

4-H Members Feed Corn Huskers

4-H CLUB members, farm women, and farmers of Black Hawk County, Iowa, recently joined cooperatively to feed the visitors at the State corn husking contest. May Anderson, home demonstration agent, and Paul B. Barger, county agent, say that a cooperative enterprise of this type has aided greatly in other cooperative efforts in the county.

In making arrangements for this project it was necessary to organize several committees operating under the direction of a head committee made up of representatives of the different club groups, the county home demonstration agent, and the county agricultural agent.

More than 300 4-H boys and girls assisted in serving between 20,000 and 25,000 visitors at the husking contest. More than 1,400 home-made pies were donated by 700 women for the contest and every pie tin was returned to the owner, an indication of the efficiency of the organization. Four hundred gallons of hot coffee was served. The number of hot dogs consumed would, if laid end to end, go a long way in satisfying hungry appetites.

The chief activity was housed in a large tent 50 by 100 feet, where 12 complete units served the food. Each of

these units was made up of a supervisor, a cashier, a checker, and 6 servers from the 4-H clubs. At tables to the rear of the serving counter worked 5 women who prepared the food for the unit. In addition to these there were 2 people to transfer food from the preparation table to the serving counter and 2 men kept the supply of coffee for the unit up to standard. The coffee was made in a large tank outside the tent. There was also a supply man for each unit to see that other supplies did not become exhausted. The wieners were cooked in large kettles outside the tent and transferred when needed. Small stoves at each of the serving units kept the food hot.

The entire project operated smoothly and in the end the county clubs had cleared between \$300 and \$400 on the day's work. Again the value of cooperation between groups in such a project had been demonstrated.

Circular letters were sent to members of the farm bureau and to the parents of 4-H club members asking their cooperation in the work. The home demonstration agent reports that other farm women have complained because they were not asked to donate, and they indicated their willingness to cooperate in future projects.

Each person asked by the general committee expressed his willingness to aid in every possible way. They furnished equipment and food and gave freely of their time to make the effort successful.

Exchanging Farm Products

Extension programs in Jefferson County, Tex., emphasized the need for the farm production of sufficient food and feed crops to assure the farm family and livestock of having a year-round food and feed supply. A survey of 150 farms in the county showed that all of them were producing food in home gardens for the family and that most of them maintained a small flock of poultry. However, only 45 of the 150 were producing a supply of food and feed to meet the year's farm requirements for the family and livestock. Twenty-five families had one or more milk cows and a few raised swine for home meat.

The educational work necessary to accomplish the task was carried out through mimeographed circulars which made recommendations regarding the amount of food or feed required for 1 person or 1 animal.

Later a survey of the county revealed that farmers, for the most part, had some surplus products on the farm while other products were lacking. The county extension workers aided in establishing a barter, trade, or exchange system among the farmers of the county which enabled them to obtain necessary supplies in return for surpluses on their own farms. Community meetings were held at which farmers filled in blanks naming the surpluses they had and the type of food or feed crops they were lacking. A bulletin was prepared from the data on the blanks and circulated to the farmers. This enabled farmers in the county to balance needs against supplies within the county without cash expense. Several commercial firms cooperated in the plan, accepting commodities in payment.

MORE than 2,700 cans this season is the record of "El Club Progresivo" women's extension club of San Luis, Colo. This total includes 1,019 glass jars—pints and quarts; and 1,672 tin cans—no. 2 and no. 3. The products canned include 22 different foods.

The club, after organizing in July of this year, bought a 16-quart pressure cooker and an automatic tin-can sealer, which were used cooperatively by the 16 members. Funds are being raised now to buy a larger cooker for next year, according to Robert Crites, the county agent.

Retrospect and Prospect

CHESTER C. DAVIS

Administrator, Agricultural Adjustment Act

HISTORY is claiming 1934. Our plans of a year ago are written now as records; our hopes for 1934 are past achievements or failures now. New plans and hopes are forming for 1935.

The 3,000,000 American farmers who are voluntarily cooperating with their neighbors in the agricultural adjustment programs have by this very action registered an active approval of them. They have said: "So far, so good."

But they are also saying: "What next? What of the future? What are the plans?"

That is as it should be. A planned economy requires more planning, more looking to the future, than did the old method of every man for himself. In the old days, the individualist lived on hope, and often a blind and helpless hope it was. It was picturesque and heroic—but often it was wasted and futile and cruel. There are too many hazards that hope cannot surmount.

Today the American farmers retain and cherish the full measure of that hope. But they endeavor to add something to it, to reinforce it with an admixture of planning. They believe the trinity of hope and hard work and planning will prove more fruitful than either hope, or hard work, or plans alone.

Much has been accomplished, the record shows.

It shows that the huge price-depressing supplies of the basic surplus commodities have been lessened partly through the drought, partly through the operation of the adjustment programs.

The record also shows that supplies are still ample for our needs. Allowing for normal consumption of wheat, we will have, next July 1, a normal supply of around 125 million bushels in spite of two successive short crops in 1933 and 1934. The cotton supply, in spite of the short crop this year, is still far above normal.

True, there is a shortage of feed for livestock. This was caused by the record number of cattle and hogs that had piled up during the years of unbridled production, and by the disastrous drought. This feed shortage was greatly relieved through various activities of the Adjustment Administration, the emergency hog-buying program of a year ago, the reduced pig farrowings of last spring, and last fall, and the drought cattle buying that began last June. The feed shortage was still further relieved by

the millions of acres of land that, under the adjustment programs, were put into grass and pasture instead of into cotton and wheat.

This record we are examining shows that the estimated total farm income for 1934 is actually higher than the average for the last 5 years—in spite of the disastrous drought. It is 19 percent larger than it was in 1933, and 39 percent more than in 1932. While prices of things farmers buy have been going up, the prices of things farmers sell have been going up faster, and consequently, farmers can buy more things with their 1934 income than with their 1932 or 1933 income.

It is gratifying to note that the processing taxes on the commodities concerned take care of the benefit checks to farmers, which by the end of the year amounted to more than half a billion dollars, thus adding enormously to farm purchasing power under a program that is self-supporting financially.

Those things the record shows.

As for the future, we know that some 600,000 wheat farmers are cooperating under contract in control of wheat acreage, which provides for a slight increase in 1935 over last year's plantings. A corn-hog program and cotton and tobacco programs for 1935 are also projected and will provide for some expansion of production. Marketing agreements in effect on many commodities extend benefits to more than a million additional farmers. These things the future promises.

Many of the other immediate possibilities that the future holds, depend directly on decisions that will flow from the country itself during 1935.

Shall we continue adjustment or shall we abandon the plans and go back to the old planless way of doing things? Shall we plan our production with an eye to our probable demand or shall we throw an increased production on the domestic and foreign markets for whatever it will bring? Shall we allow the production to be restricted—too late—after 5-cent cotton and 30-cent wheat have starved production down, or shall we plan it as a Nation now?

To me, the most assuring hope we have for 1935 is the fact of the 3,000,000 farmers who are cooperating in the programs today. It is on this cooperation I have my hope for the coming year.



The FARMERS' TRAIL ... LEADS ON

A NEW FILM STRIP PREPARED BY THE EXTENSION SERVICE IN COOPERATION WITH THE AGRICULTURAL ADJUSTMENT ADMINISTRATION

THIS film strip (Series 350) illustrates the changes which have taken place in both production and marketing of American farm commodities during the course of the last generation, and also the farmers' efforts to meet these changes, assisted by the Government.

The series was prepared from material assembled by the Field Information Section of the Agricultural Adjustment Administration.

The film strip is available for purchase at \$1.44 from Dewey & Dewey, Kenosha, Wis., after first obtaining authorization from the United States Department of Agriculture. Blanks for this purpose will be supplied upon request to the Division of Cooperative Extension.

EXTENSION SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE, WASHINGTON, D. C.
